DOCUMENT RESUME

ED 026 315 24 SP 002 164

By-Rousseau, Leon; And Others

Appendix J. An Experimental Model to Enable Instructional Managers to Demonstrate Interaction Competency.

Northwest Regional Educational Lab., Portland, Oreg.
Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.
Bureau No-BR-8-9022
Pub Date Oct 68
Contract-OEC-0-8-089022(010)
Note-26p.; Appendix J in A Competency Based, Field Centered, Systems Approach to Elementary Teacher Education; Final Report. Vol. II, p222-247.
EDRS Price MF-$0.25 HC-$1.40
Descriptors-Affective Behavior, Communication (Thought Transfer), Counseling, Educational Research, Individualized Instruction, Interaction Process Analysis, Interpersonal Competence, *Microteaching, *Models, Planning, Remedial Instruction, Selection, *Student Teacher Relationship, Systems Approach, *Task Analysis, *Teacher Education, Video Tape Recordings
Identifiers-Affective Domain, *ComField Model Teacher Education Program, Taxonomy of Educational Objectives

The interaction tasks (or communication process) model, an experimental model to enable instructional managers (in this case education students undergoing microteaching) to demonstrate competence in their interactions with students, is predicated upon four sequential component subsystems: (1) selection, (2) planning, (3) criterion task, and (4) remediation. If necessary, the criterion task subsystem may be replicated as a fifth component. Moreover, a sixth component, the counseling subsystems, may be entered at any time from within one of the other components. By means of this model, it is possible to analyze five interaction tasks--communicating new information or demonstrating a specific psychomotor skill, communicating a specific learning task in order to elicit responses indicating willingness to undertake the task, eliciting responses indicating the application of a previously comprehended abstraction to solve a problem, eliciting responses which evidence divergent thinking, and eliciting responses indicating valuing behavior (according to the 3.0 level of TAXONOMY OF EDUCATIONAL OBJECTIVES--AFFECTIVE DOMAIN). (This document and SP 002 155-SP 002 180 comprise the appendixes for the ComField Model Teacher Education Program Specifications in SP 002 154.) (Author/SG)

ED026315

APPENDIX J--AN EXPERIMENTAL MODEL TO ENABLE INSTRUCTIONAL MANAGERS TO DEMONSTRATE INTERACTION COMPETENCY

Leon Rousseau
Herbert Hite
William Drummond

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Submitted for a Consortium of
Institutions and Agencies by the
Northwest Regional Educational Laboratory
400 Lindsay Building
710 S. W. Second Avenue
Portland, Oregon 97204

SP002164

AN EXPERIMENTAL MODEL TO ENABLE INSTRUCTIONAL MANAGERS TO DEMONSTRATE INTERACTION COMPETENCY

Leon Rousseau
Herbert Hite
William Drummond

Description of Model Components

transmits message (to)	The means chosen by the Instructional Manager must be appropriate in terms of (a) kind of message (b) principles of learning (c) learner characteristics (d) media (e) environment.
receives and interprets or reinterprets	Depending upon the kind of message communicated, pupils will differ in their interpretation of it, i.e., although they have equal access to the message, their perceptions of what is required of them differ.
reacts by responding	The reactions by pupils to a message received constitutes a set of overt and/or covert responses which may or may not meet the criterion of acceptable performance.
provides feedback and evaluates	Both the kinds of responses in terms of the task objective and the extent to which the class of pupils is sampled for responses serve as a basis upon which the Instructional Manager evaluates the performance of that objective.

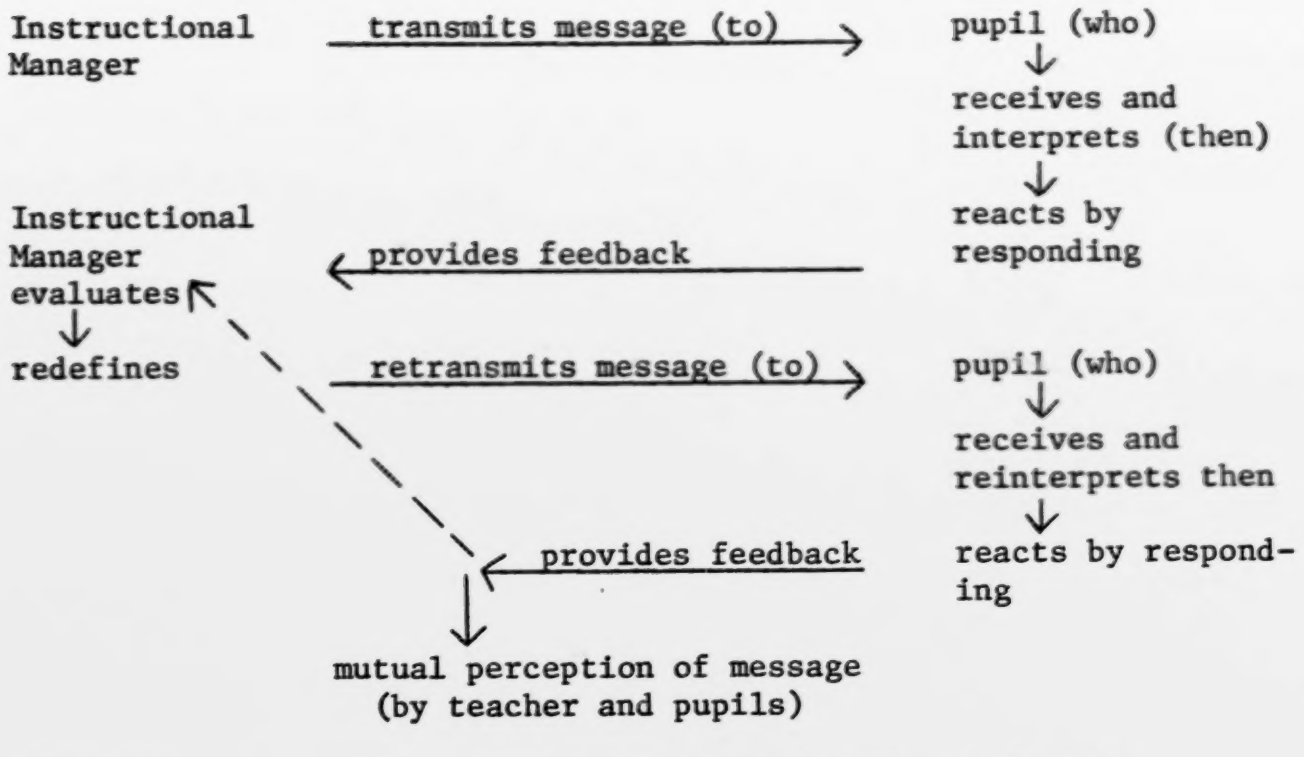
Communication Process Model

The model described below illustrates one way in which the process of communication between the Instructional Manager and the pupils may be conceptualized. The model as structured:

a. permits the communication of any content variable (message) to the pupils

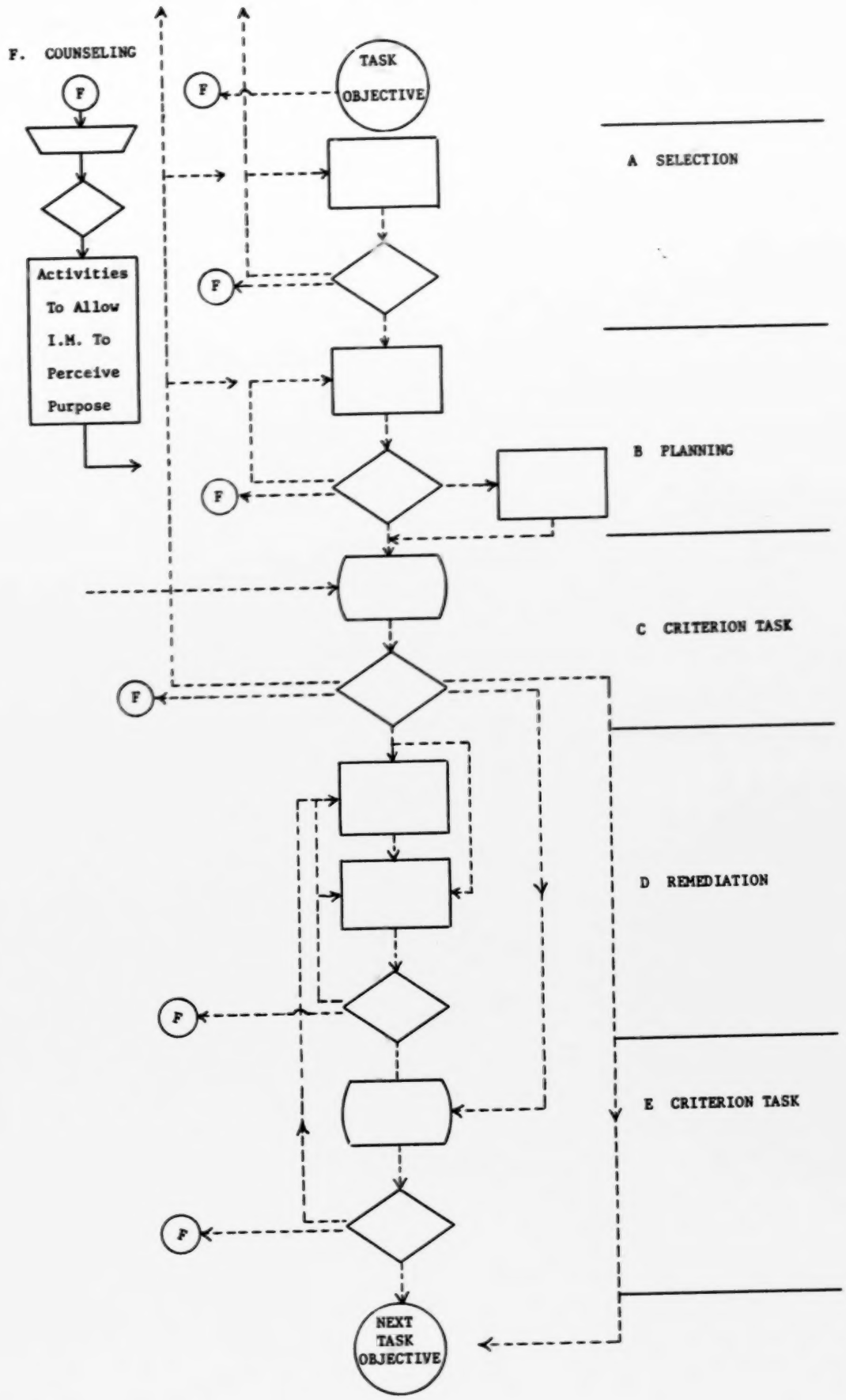
b. identifies, describes and arranges in sequence the components making up the total communication process thereby aiding the Instructional Manager in the planning and execution of any interaction task involving communication

c. allows for revision of the communication strategy



redefines	If responses indicate that the criterion of acceptable performance is not met, the Instructional Manager may redefine the message and/or the mode of transmitting it.
mutual perception of task	The criterion of acceptable pupil behavior will be met when the Instructional Manager judges that misunderstanding as to required performance expected has been minimized.

INTERACTION TASKS MODEL



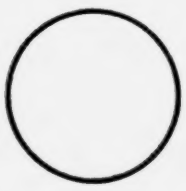
The system model detailed in the chart on the preceding page describes all of the six interaction tasks. This task (or any one of the tasks) is composed of four compoeents, or subsystems. These are, in sequence:

SELECTION SUBSYSTEM	A
PLANNING SUBSYSTEM	B
CRITERION TASK SUBSYSTEM	C
REMEDIATION SUBSYSTEM	D
THE CRITERION SUBSYSTEM IF REPLICATED	E

A component or subsystem not in sequence, which the Instructional Manager may enter anywhere from within these components is:

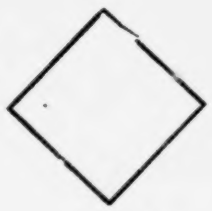
COUNSELING SUBSYSTEM	F

The subcomponents making up the total model are encoded as follows:



denotes statement of task objective (one of the six interaction tasks)

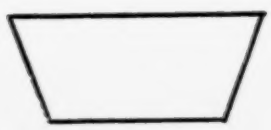
denotes some kind of activity towards the task objective, undertaken by the Instructional Manager



denotes evaluation of some kind of activity of the Instructional Manager. It may be undertaken by any or all of: self, supervising staff, peers, pupils

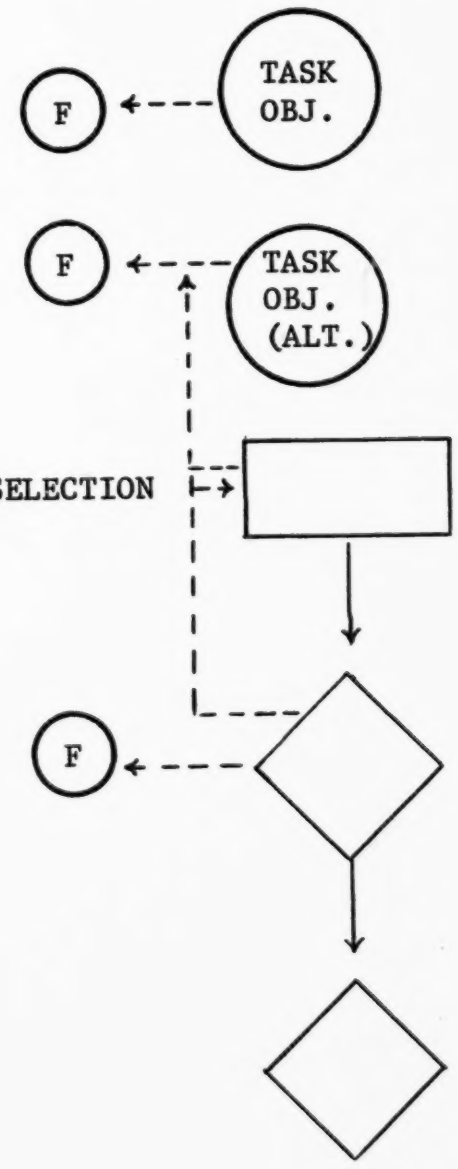
denotes video taped video taped criterion task performed by the Instructional Manager in accord with the statement of the task objective

denotes the most probable sequence of the sub-components that the Instructional Manager follows



denotes diagnosis and/or assessment of entering behavior of the Instructional Manager

denotes optional bypassing of the Instructional Manager within the task or recycling the Instructional Manager within the task, to previous tasks or to the parallel task F



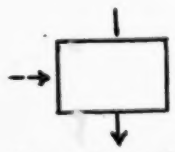
TASK #1

Description of Task

The Instructional Manager will communicate to pupils some bit of new information, to ensure knowledge of and/or comprehension of that bit of information

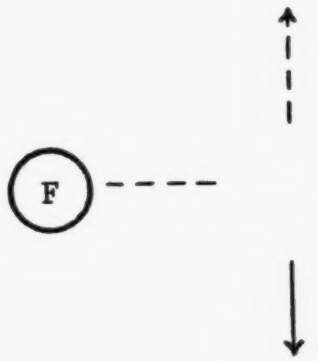
or (Alternative Task Description)

The Instructional Manager will communicate or demonstrate to pupils a specific psychomotor skill to allow for the practice of that skill.



The Instructional Manager will select the bit of information to be communicated from one of the previously written low level (1.00 or 2.00 of Bloom's Taxonomy) objectives of Task IV. (Alternate) The Instructional Manager will select a specific psychomotor skill from one of the previously written objectives of Task VI. Criteria for the selection will include (a) those from previous tasks (ex. Task 8) (b) sufficient specificity so that time interval of communication is short.

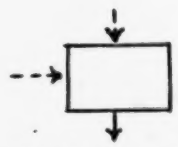
The Instructional Manager would submit a written statement of the bit and the appended criteria chosen to at least one other peer.



The Instructional Manager optionally required to revise the statement and resubmit or review previous task systems.

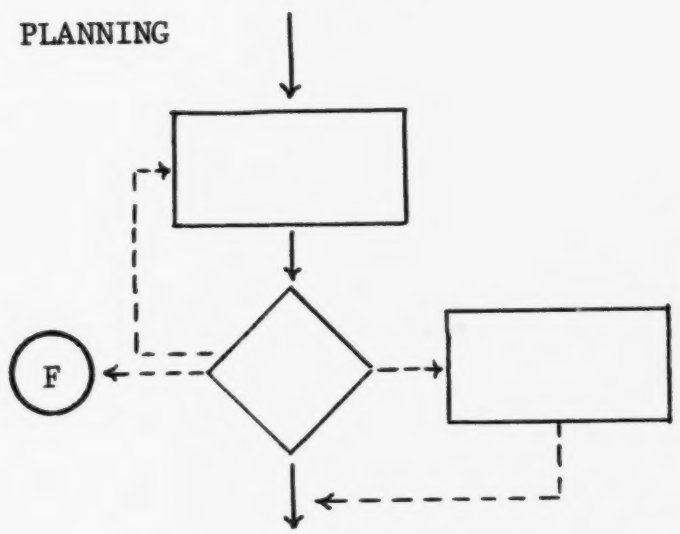
The Instructional Manager optionally required to enter counseling subsystem.

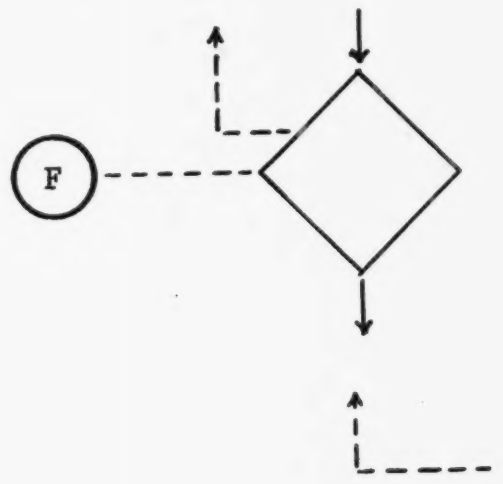
Instructional Manager's formulation of task objective meets standards set by criteria.



The Instructional Manager will devise and write a strategy for communication to the pupils of the bit of information (Alt.) specific psychomotor skill) selected. The plan of the strategy should be patterned after the Communication Process Model (appended). Criteria include descriptions of (a) means of transmitting the bit (alternatively, skill) (cf Communication Model: transmits message) (b) means of eliciting frequent pupil responses indicating comprehension of bit (alternatively, practicum of skill) (c) means of reinforcing appropriate responses and extinguishing inappropriate responses (cf Communication Model: feedback). An additional strategy, parallel in structure to the first, would be required of the Instructional Manager. It would either be a variation in part of the first, or entirely different. Its purpose is to provide the means whereby the Instructional Manager restructures the communication of the information (cf Communication Model - redefines).

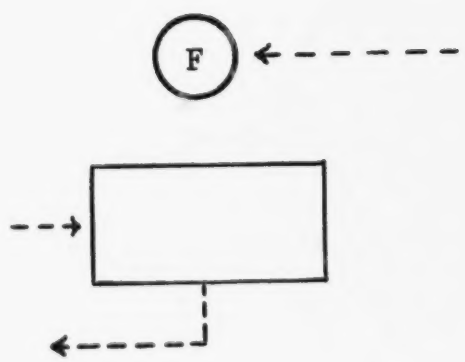
B PLANNING





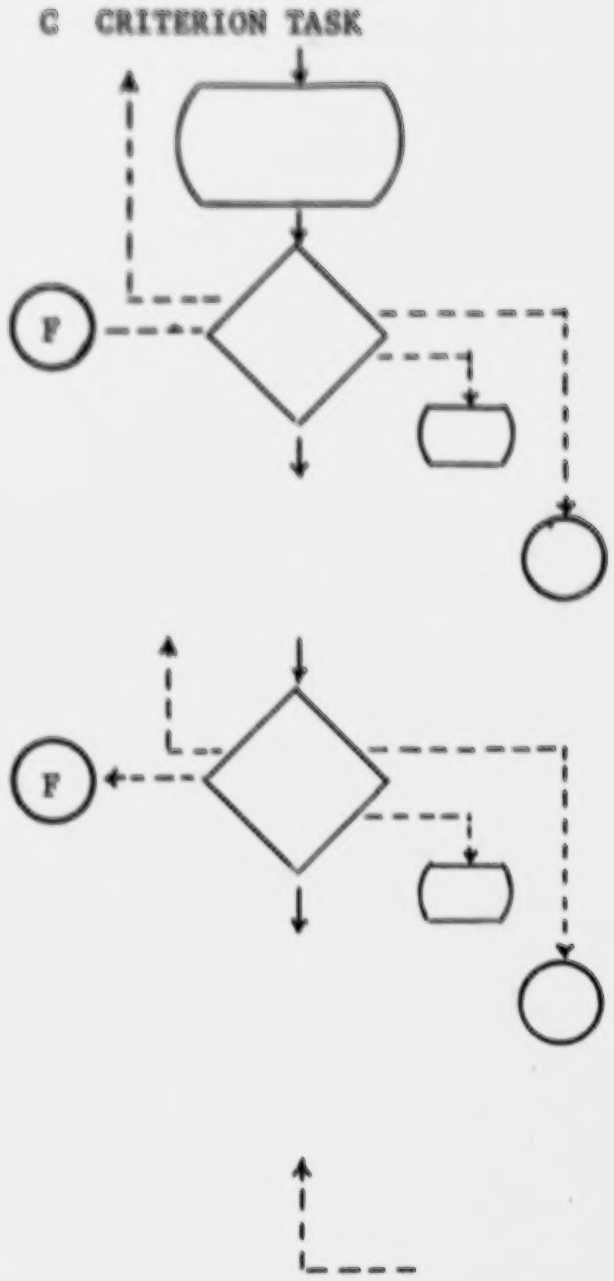
Both strategies would be evaluated by staff in terms of the criteria stated.

The Instructional Manager may optionally be required to revise written plans if any of: media selection, transmission mode, elicitation of responses, reinforcement or restructuring is inappropriate.



As above.

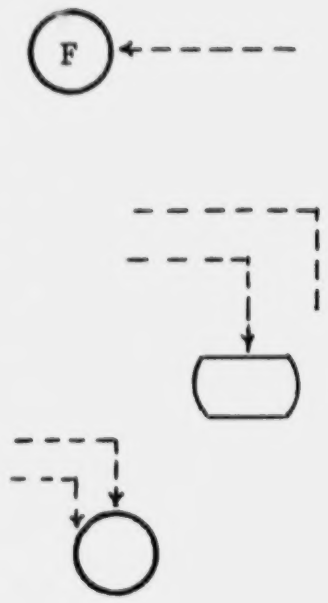
Instructional Manager may optionally view video taped or filmed performance of task objective by model to identify and compare components of performance to his criteria before attempting criterion task.



Instructional Manager will perform task by microteaching (video taped) to pupils.

Criterion task (video taped) evaluated in conference by staff according to criteria stated in planning.

Instructional Manager recycled into selection or planning components, or to previous systems.



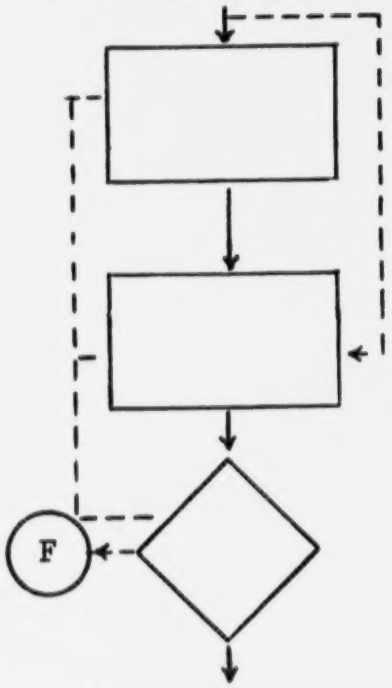
Instructional Manager enters parallel subsystem component COUNSELING if consensus is that failure to communicate information is intra-personal rather than meeting criteria.

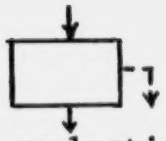
Instructional Manager required to reteach if and only if a component of performance is below criterion level.

Criterion task meets performance standards set by criteria. Instructional Manager proceeds to next task.

Instructional Manager proceeds to REMEDIATION subsystem.

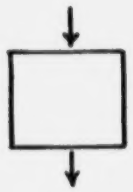
D REMEDIATION



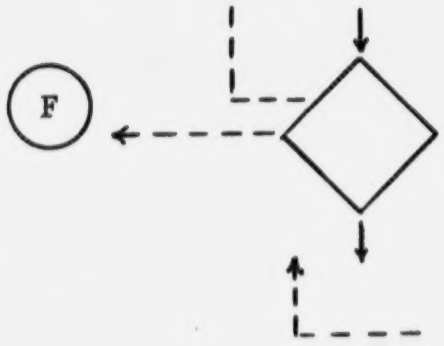


Instructional Manager revises strategy of communication as a result of the evaluation of the microteaching performance.

Optional bypassing of the above activity.

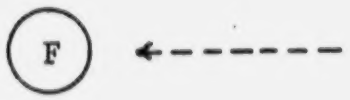


Instructional manager reviews alternate video taped or filmed performance of task objective by model or peer to identify and compare components of performance to set of criteria before attempting criterion task. Instructional Manager then tests revised plan and demonstrates to peers (mirror teach). Peers evaluate. Instructional Manager revises plans.



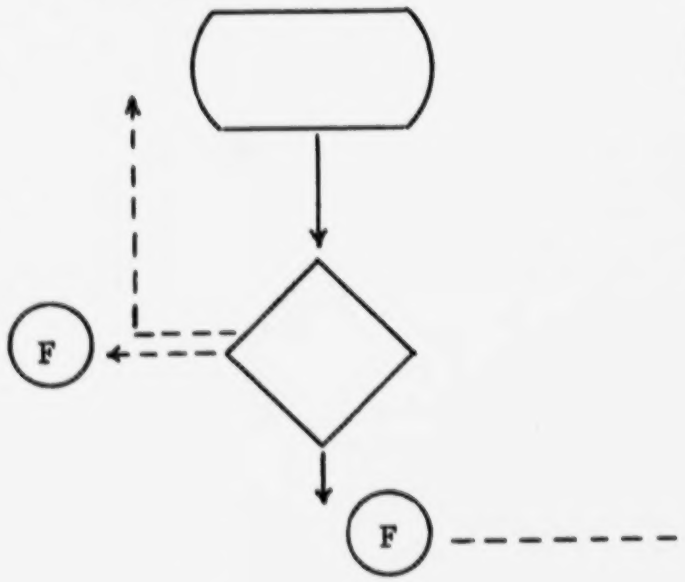
Evaluation ot the revised plan by staff in conference with the Instructional Manager

Recycling Instructional Manager to either or both alternate activities.



As above.

E CRITERION TASK



Instructional Manager proceeds to CRITERION TASK subsystem

Instructional Manager will perform task by micro-teaching (video taped) to new set of pupils.

Video taped criterion task evaluated by staff, self and pupils in terms of performance criteria.

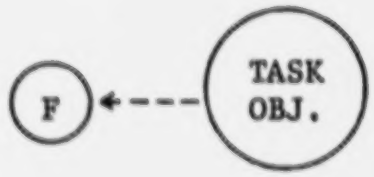
Recycle of Instructional Manager to previous subsystem of REMEDIATION

As above.

Criterion task meets performance standards set by criteria. Instructional Manager proceeds to next task objective.

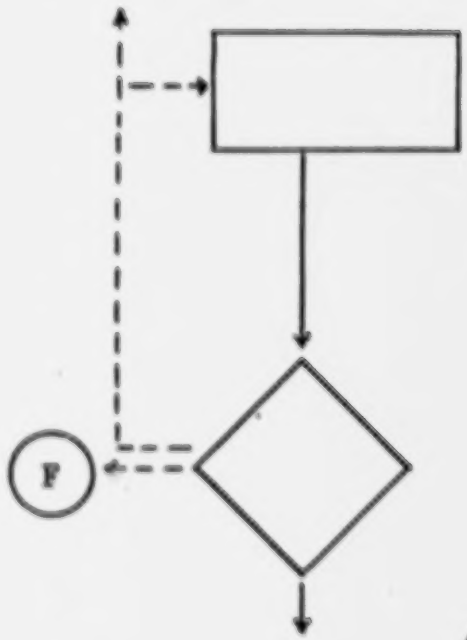
Next task objective.

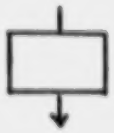
TASK #2



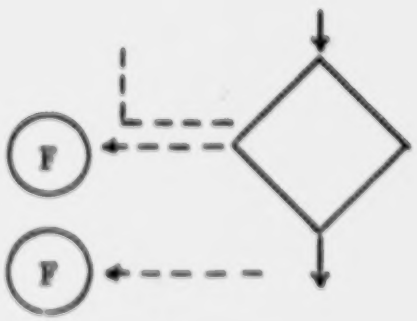
The Instructional Manager will be required to communicate a specific learning task to pupils (Task #2) in order to elicit responses indicating willingness of pupils to undertake the task. (Low Level Affective Responding)

A SELECTION





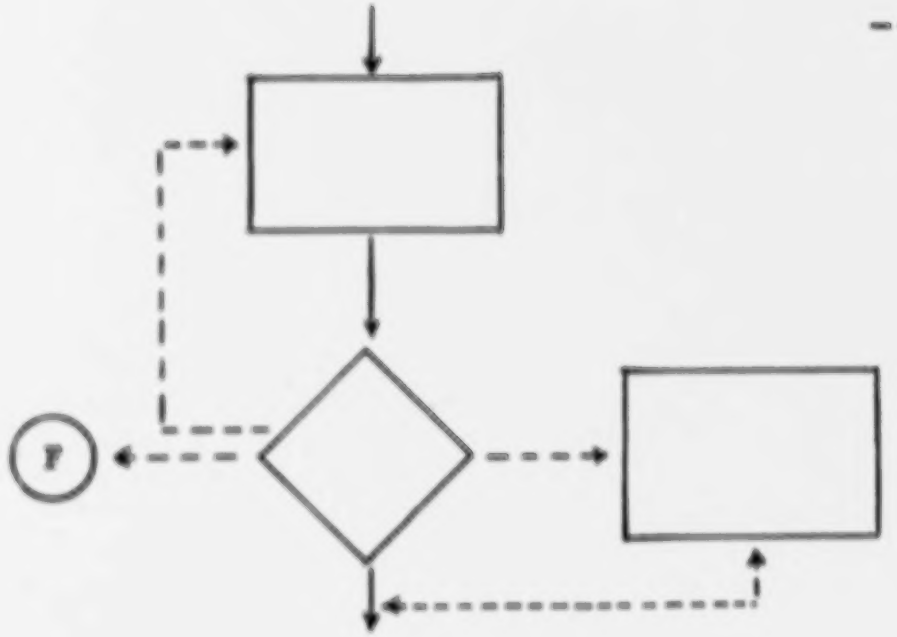
The Instructional Manager will repeat task #1 in part, by (a) selecting an objective whose component of communication is likely to satisfy this task objective, (b) optionally replicating the selection and planning subsystem of that task.

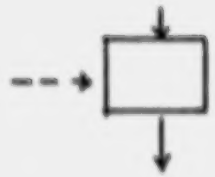


Staff evaluation of (a) and/or (b)

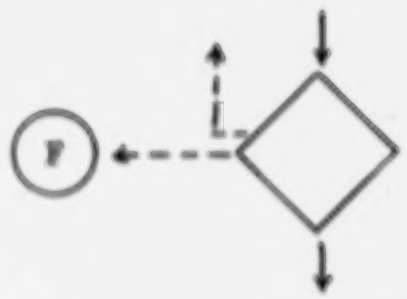
Instructional Manager enters subsystem COUNSELING

B PLANNING



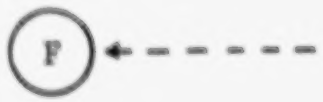


The Instructional Manager will describe, in writing, a way to elicit frequent pupil responses indicating willingness to undertake the task. One such way would be justifying task in terms of pupil needs. An alternate way would be stated by the Instructional Manager to allow redundancy in eliciting responses.

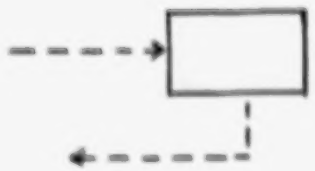


Both ways would be evaluated by staff in terms of appropriateness to component of communication.

The Instructional Manager may optionally be required to devise more appropriate ways of eliciting pupil responses.

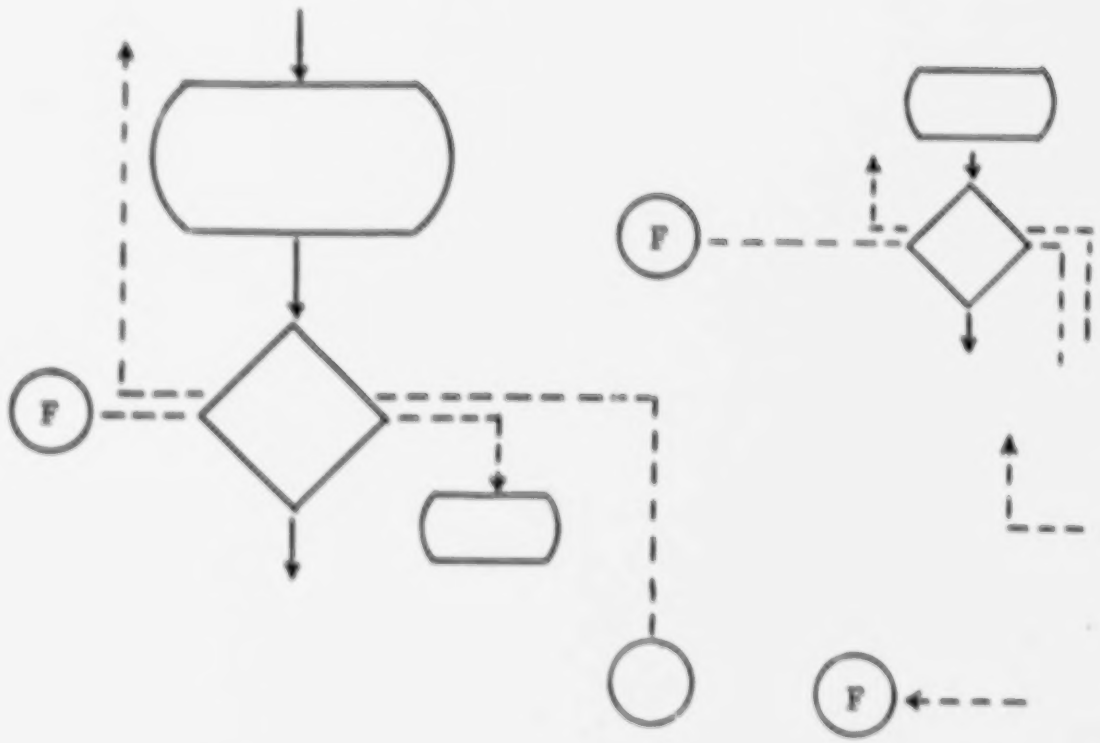


Instructional Manager enters parallel subsystem component COUNSELING if fails to comprehend significance of task requirement.



The Instructional Manager may optionally be required to view filmed performance of task objective by model, or to undertake tasks, for example, prescribed by Vinicet film loop. The perceived purpose is either to acquire novel ways of eliciting frequent pupil responses or to compare ways against his criteria before attempting criterion task.

C CRITERION TASK



Instructional Manager will perform task by microteaching (video taped) to pupils.

Criterion task (video taped) evaluated in conference by staff according to criteria stated in planning.

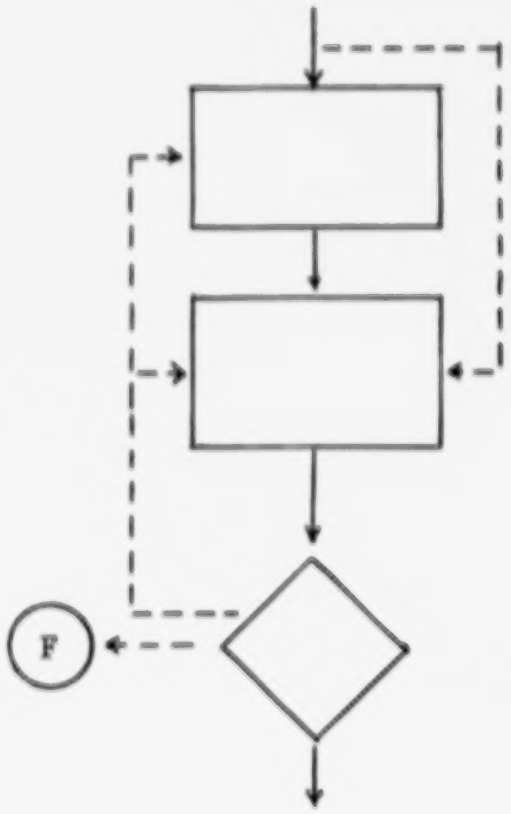
Instructional Manager recycled into selection or planning components, or to previous systems.

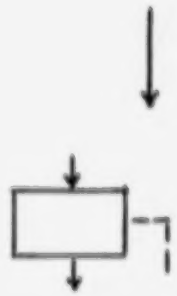
Instructional Manager enters subsystem component COUNSELING if consensus is that failure to elicit appropriate responses is intrapersonal rather than meeting criteria.

Instructional Manager required to reteach if and only if a component of performance is below criterion level.

Criterion task meets performance standards set by criteria. Instructional Manager proceeds to next task.

D REMEDIATION

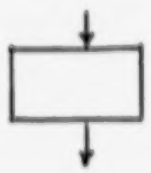




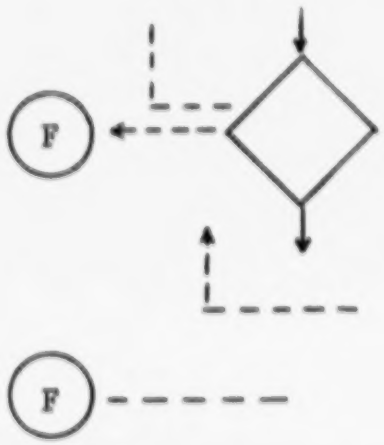
Instructional Manager proceeds to REMEDIATION subsystem.

Instructional Manager revises way of eliciting frequent pupil responses as a result of the evaluation of the microteaching performance.

Optional bypassing of the above activity.



Instructional Manager reviews alternate video taped or filmed performance of task objective by model or peer to identify and/or compare task components of performance to set of criteria. The Instructional Manager then tests revised plans and demonstrates to peers. (mirror teach) Peers evaluate and the Instructional Manager revises as required.

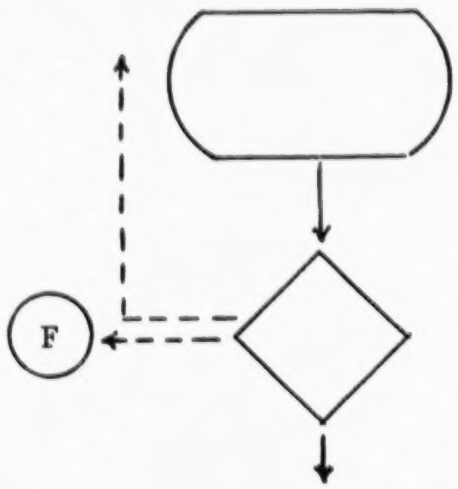


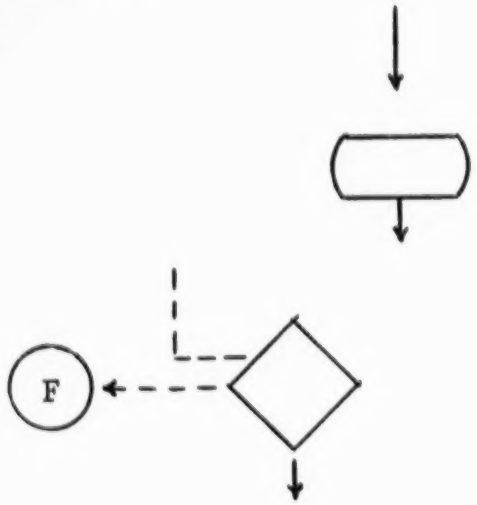
Evaluation of the revised plan by staff in conference with the Instructional Manager.

Recycling Instructional Manager to either or both alternate activities.

As above

E CRITERION TASK





Instructional Manager proceeds to CRITERION TASK subsystem.

Instructional Manager will perform task by microteaching (video taped) to new set of pupils.

Video taped criterion task evaluated by staff, self, and pupils in terms of performance criteria.

Recycle of Instructional Manager to previous subsystem of REMEDIATION.

F ←----- As above.

Criterion task meets performance standards set by criteria. Instructional Manager proceeds to next task objective.

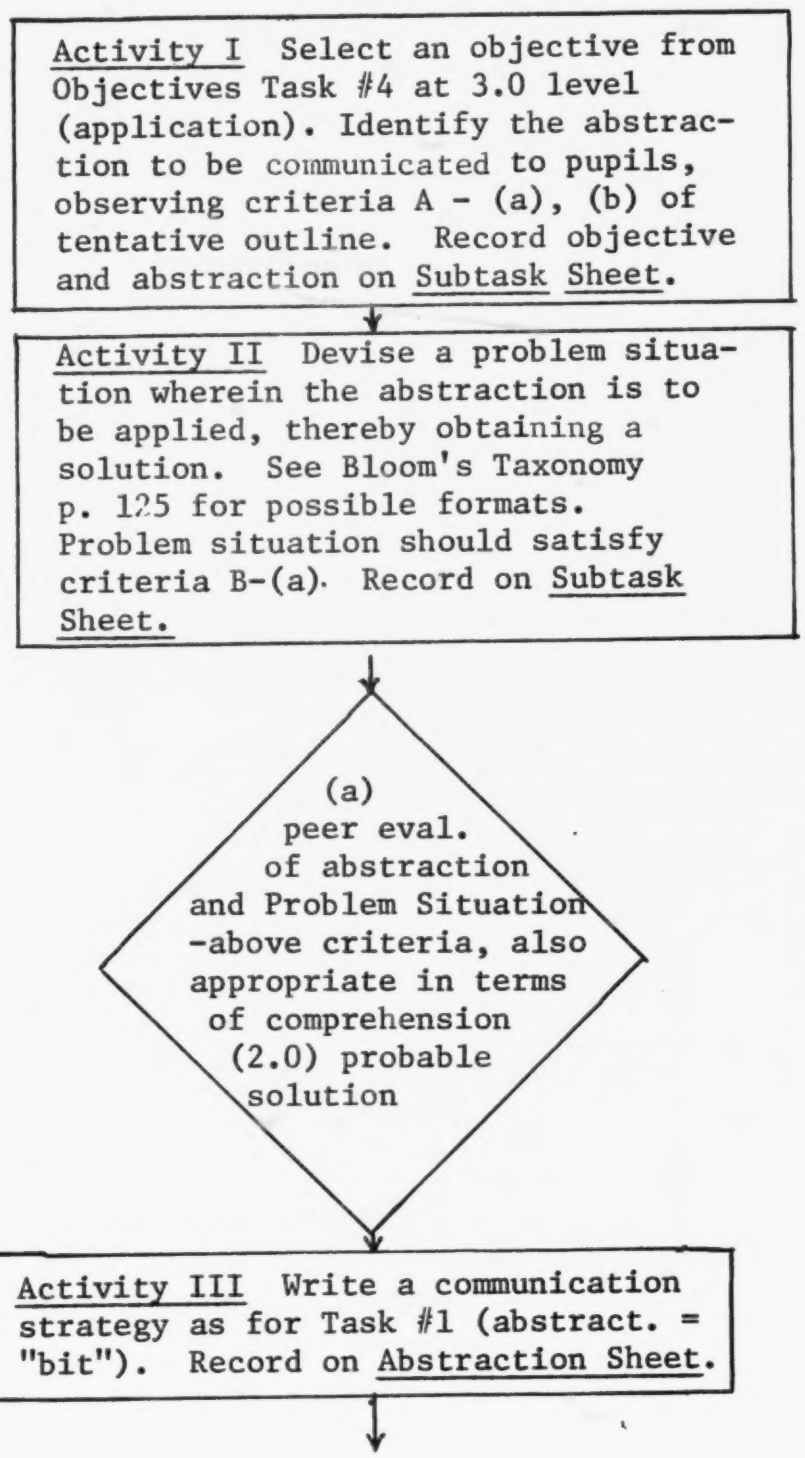
Next task objective.

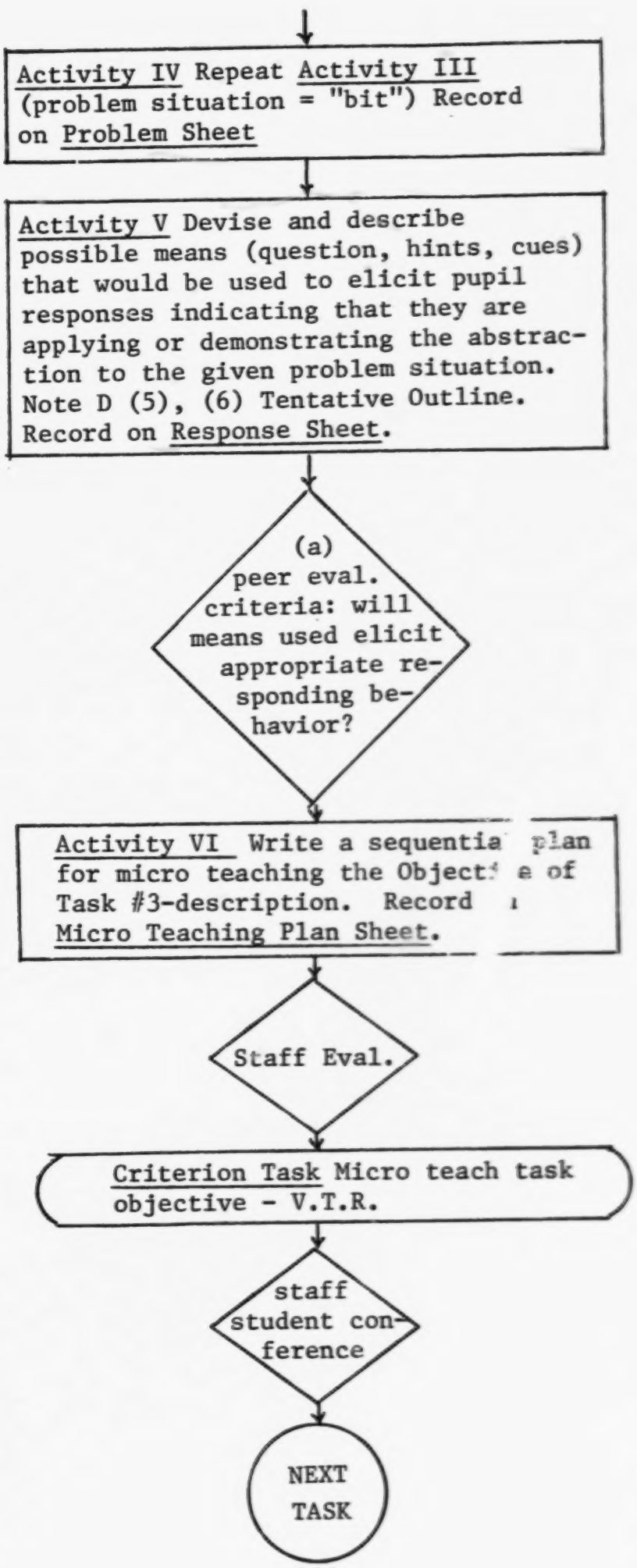
INTERACTION TASK #3

Elicit responses from pupils indicating the application of a previously comprehended abstraction* to the solution of a problem situation.

Note: (a) Where peer evaluation is indicated - one other is sufficient.

(b) *The abstraction could be a rule, procedural method, theorem, definition, principle, lemma, concept, theory, law, generalization. . .?

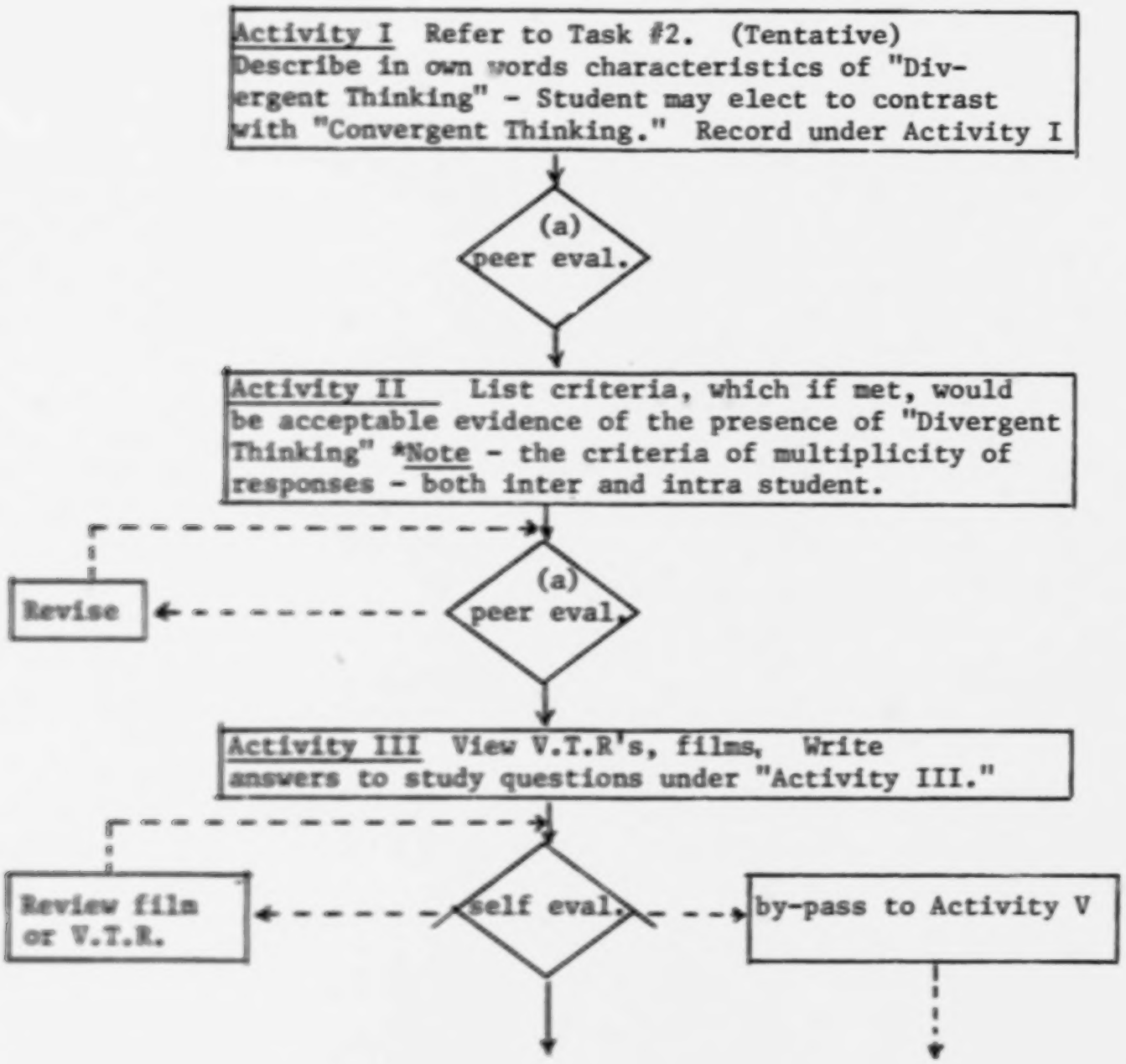

Activity I Select an objective from Objectives Task #4 at 3.0 level (application). Identify the abstraction to be communicated to pupils, observing criteria A - (a), (b) of tentative outline. Record objective and abstraction on Subtask Sheet.
Activity II Devise a problem situation wherein the abstraction is to be applied, thereby obtaining a solution. See Bloom's Taxonomy p. 125 for possible formats. Problem situation should satisfy criteria B-(a). Record on Subtask Sheet.
(a) peer eval. of abstraction and Problem Situation -above criteria, also appropriate in terms of comprehension (2.0) probable solution
Activity III Write a communication strategy as for Task #1 (abstract. = "bit"). Record on Abstraction Sheet.

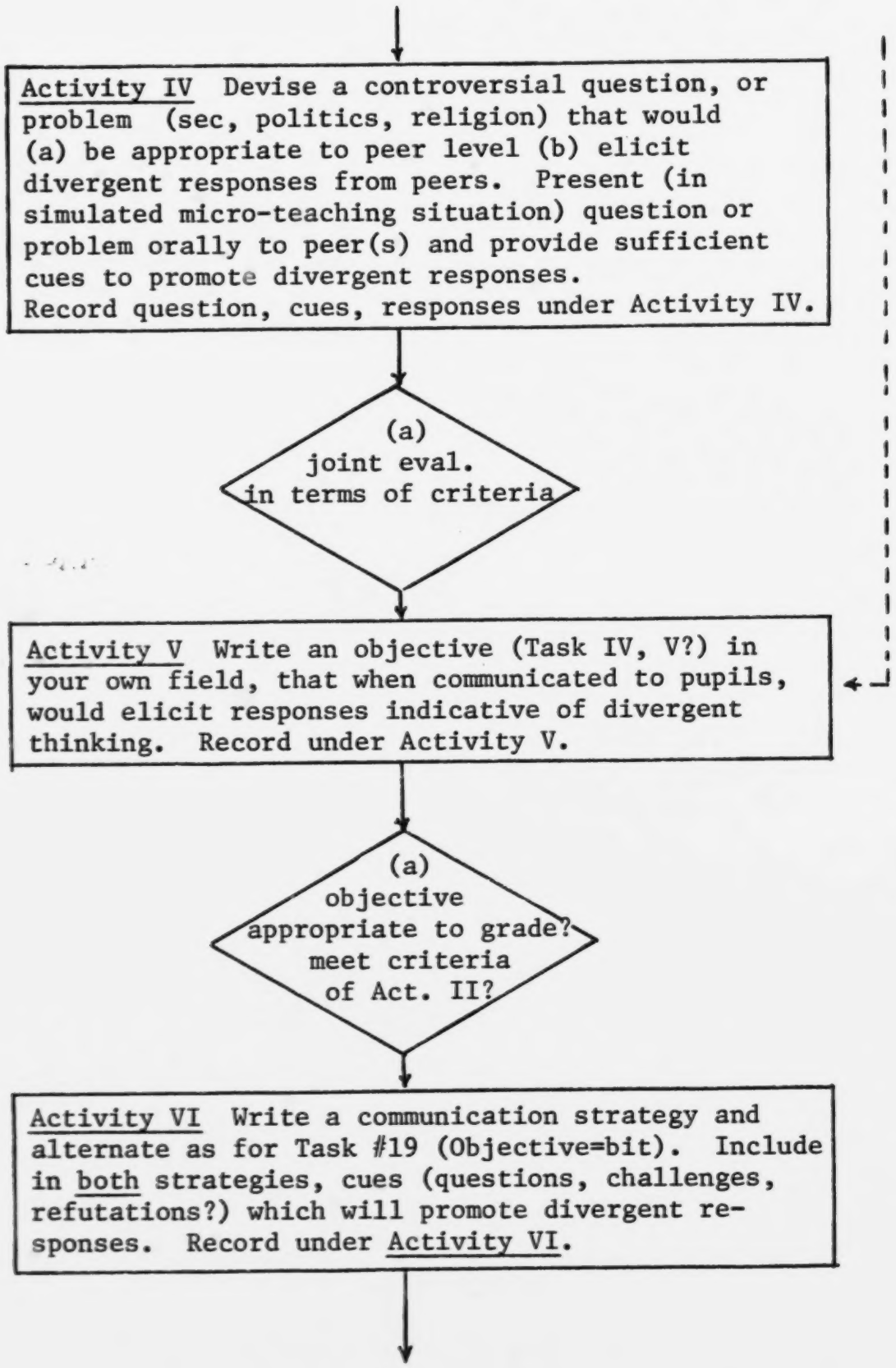

Activity IV Repeat Activity III (problem situation = "bit") Record on Problem Sheet
Activity V Devise and describe possible means (question, hints, cues) that would be used to elicit pupil responses indicating that they are applying or demonstrating the abstraction to the given problem situation. Note D (5), (6) Tentative Outline. Record on Response Sheet.
(a) peer eval. criteria: will means used elicit appropriate responding behavior?
Activity VI Write a sequentia plan for micro teaching the Object e of Task #3-description. Record Micro Teaching Plan Sheet.
Staff Eval.
Criterion Task Micro teach task objective - V.T.R.
staff student conference
NEXT TASK

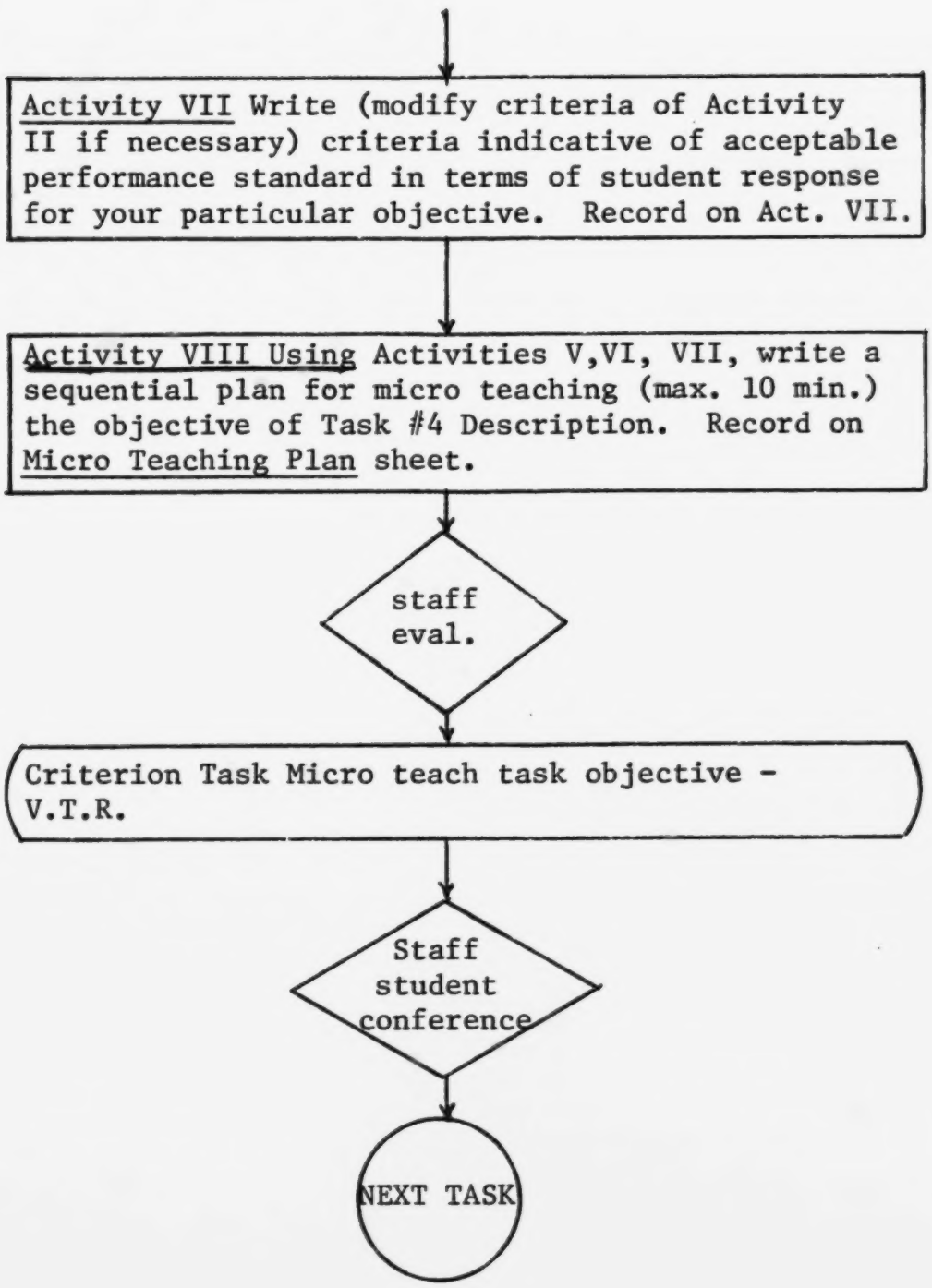
INTERACTION TASK #4

Elicit responses from pupils indicating evidence of divergent thinking.

Note: (a) Where peer evaluation is indicated - one other is sufficient.


Activity I Refer to Task #2. (Tentative) Describe in own words characteristics of "Divergent Thinking" - Student may elect to contrast with "Convergent Thinking." Record under Activity I
(a) peer eval.
Activity II List criteria, which if met, would be acceptable evidence of the presence of "Divergent Thinking" *Note - the criteria of multiplicity of responses - both inter and intra student.
(a) peer eval.
Revise
Activity III View V.T.R's, films, Write answers to study questions under "Activity III."
self eval.
Review film or V.T.R.
by-pass to Activity V


Activity IV Devise a controversial question, or problem (sec, politics, religion) that would (a) be appropriate to peer level (b) elicit divergent responses from peers. Present (in simulated micro-teaching situation) question or problem orally to peer(s) and provide sufficient cues to promote divergent responses.
Record question, cues, responses under Activity IV.
(a)
joint eval.
in terms of criteria
Activity V Write an objective (Task IV, V?) in your own field, that when communicated to pupils, would elicit responses indicative of divergent thinking. Record under Activity V.
(a)
objective
appropriate to grade?
meet criteria
of Act. II?
Activity VI Write a communication strategy and alternate as for Task #19 (Objective=bit). Include in both strategies, cues (questions, challenges, refutations?) which will promote divergent responses. Record under Activity VI.


Activity VII Write (modify criteria of Activity II if necessary) criteria indicative of acceptable performance standard in terms of student response for your particular objective. Record on Act. VII.
Activity VIII Using Activities V,VI, VII, write a sequential plan for micro teaching (max. 10 min.) the objective of Task #4 Description. Record on Micro Teaching Plan sheet.
staff eval.
Criterion Task Micro teach task objective - V.T.R.
Staff student conference
NEXT TASK

INTERACTION TASK #5

Elicit responses from pupils indicating VALUING (behavior) within the 3.0 level of the Taxonomy of Educational Objectives -- Affective Domain.

1. Using Objectives Task #5, and/or Krathwohl pp. 139-153, list criteria in terms of both (a) verbal (b) non-verbal, responses that you would accept as indicative of Valuing Behavior (3.0) irrespective of any specific task objective.

   Note Since the affective behaviors are hierarchial, you may include responses at levels 4.1 and above. (See in particular, Task #5 - Figure 1, "is willing to induce others to try." etc.) Clearly a pupil demonstrating "soap-box" behavior (4.2) has, in fact, shown Valuing Behavior (3.0) thereby satisfying the task description.

2. Select either a Task #5 objective or appropriate alternative, in your field, satisfying Task #5 description.*

* Probably the cognitive part of the objective should be based upon knowledge which the pupil already possesses. The task then, within 10 minutes,would be to get the pupil to express some valuing behavior toward this knowledge.

3. Select the criteria from 1. that would be appropriate to the Objective you selected in 2.

4. Write at least one strategy for communicating the cognitive part of the task objective satisfying the following criteria. The strategy should:

   (a) parallel Task #1 description (Activities II,III,IV,V)

   (b) include verbal cues that elicit responses sequentially at the 1.0 and 2.0 levels of the Taxonomy. (See Task 5 or Krathwohl pp. 112-115, and pp. 130-132, for example.

Note: Responding at 1.0 and 2.0 levels is similar to Task #18 and 19 descriptions.

   (c) force responses indicating Valuing Behavior or equivalently make a pupil "take a stand" on the task issue.

(d) (Optional) include appropriate cues at 4.1 or above level.

5. Write a sequential plan for micro teaching the task objective (max. 12 min.)